Education and Earnings

Does going to school pay off? Most people think so. Currently, almost 90% of young adults graduate from high school and about 60% of high school seniors continue on to college the following year. People decide to go to college for many reasons. One of the most compelling is the expectation of future economic success based on educational attainment.

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In 2000, 84% of American adults ages 25 and over had at least completed high school; 26% had a bachelor's degree or higher. Both figures were all-time highs. In 1975, 63% of adults had a high school diploma, and 14% had obtained a bachelor's degree. Much of the increase in educational attainment levels of the adult population is due to a more educated younger population replacing an older, less educated population. As more and more people continue their schooling, this more highly educated population pursues opportunities to enter into occupations yielding higher returns in earnings.

Adults ages 25 to 64 who worked at any time during 1997-1999 earned an average of \$34,700 per year. Average earnings ranged from \$18,900 for high school dropouts to \$25,900 for high school graduates, \$45,400 for college graduates, and \$99,300 for workers with professional degrees (M.D., J.D., D.D.S, or D.V.M.). With the exception of workers with professional degrees who have the highest average earnings, each successively higher education level is associated with an increase in earnings.

Over the past 25 years, earnings differences have grown among workers with different levels of educational attainment. In 1975, full-time, year-round workers with a bachelor's degree had 1.5 times the annual earnings of workers with only a high school diploma. By 1999, this ratio had risen to 1.8. Workers with an advanced degree, who earned 1.8 times the earnings of high school graduates in 1975, averaged 2.6 times the earnings of workers with a high school diploma in 1999. During this same period, the relative earnings of the least educated worker fell. While in 1975, full-time year round workers without a high school diploma earned 0.9 times the earnings of workers with a high school diploma; by 1999, they were earning only 0.7 times the average earnings of high school graduates.

Sex, Education and Earnings

Among people ages 25 and older, the percentage of men and women with a bachelor's degree has increased sharply over the past 25 years, with women markedly narrowing the gap. In 1975, 18% of men and 11% of women had attained a bachelor's degree. By 2000, 28% of men and 24% of women had a bachelor's degree. In fact, in each year since 1982, more American women than men have received bachelor's degrees. Additionally, 84% of both men and women had completed high school in 2000, up from 63% for men and 62% for women in 1975.

Men had higher average earnings than women with similar educational attainment. Among full-time, year-round workers ages 25 to 64, the female-to-male earnings ratio was 0.67 during 1997-1999. This wage gap occurred with very little variation at every level of educational attainment. Across the ages, however, the female-to-male earnings ratio was higher among younger full-time, year-round workers (0.84) than among older workers (0.56). Clearly, younger women begin their work life with earnings much closer to those realized by men. This pattern of male and female younger workers starting with closer earnings than those of older workers is not new. In 1975, the earnings ratio was 0.69 for younger workers compared with 0.56 for older workers. The age differences remain, although the earnings gap between younger men and women is closing.

Source: The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings, U.S. Census Bureau

At both the high school and bachelor's attainment level, the earnings of younger women and men are relatively close with women earning about four-fifths of men's earnings. However, for workers with a bachelor's attainment, the earnings difference between men and women becomes more pronounced as workers age (from 0.81 for ages 25 to 29 years compared with 0.60 for ages 60 to 64), compared with a relatively flat earnings difference for workers at the high school level.

Numerous events over one's work life may account for the expanding wage gap with age, such as continuous participation in the labor force, commitment to career goals, competing events, discrimination, and promotions. These and other factors may lower the earnings of women relative to men, and these differences play out dramatically with total work life earnings.

On average, a man with a high school education will earn about \$1.4 million from ages 25 to 64 years. This compares with about \$2.5 million for men completing a bachelor's degree and \$4.8 million for men with a professional degree. In contrast, men with less than a high school education will earn an average of \$1.1 million.

Women in the same age group completing high school will earn an average of \$1.0 million, about 40 percent less than the estimated \$1.6 million for women completing a bachelor's degree. The work life payoffs for women with professional (\$2.9 million) and doctoral (\$2.5 million) degrees, though substantial, lag markedly behind those of men with the same educational attainment.

The cumulated difference between men and women amounts to about \$350,000 for high school dropouts. The difference increases to \$450,000 for high school graduates and to about twice that for bachelor's degree holders. Men with professional degrees may expect to earn almost \$2 million more than their female counterparts over their work life.

Race and Hispanic Origin, Education, and Earnings

Educational attainment differs significantly by race and Hispanic origin. Among adults 25 years old and over in 2000, 88% of White, non-Hispanics, 86% of Asians and Pacific Islanders, and 79% of Blacks had attained at least a high school diploma. Similarly, 28% of White non-Hispanics, 44% of Asians and Pacific Islanders, and 17% of Blacks had received a Bachelor's degree. For Hispanics (who may be of any race), only 57% had a high school diploma and 11% a bachelor's degree. Even accounting for these large differences in educational attainment by looking at earnings within each education category, earnings differences persist and can accumulate dramatically over a 40 year work life.

White non-Hispanics earn more than Blacks or Hispanics at almost every level of educational attainment. For example, among full-time, year-round workers with a high school education, White non-Hispanics will earn an average of \$1.3 million during their work life, compared with about \$1.1 million earned by Blacks and Hispanics. At the bachelor's level, White non-Hispanics can expect total earnings of about \$2.2 million, compared with \$1.7 million for Blacks or Hispanics.

While Asians and Pacific Islanders earn less than White non-Hispanics with similar educational attainment at the high school graduate level and the bachelor's level, Asians and Pacific Islanders with graduate degrees (master's, doctoral or professional) have earnings similar to those of White non-Hispanics. Among full-time, year-round workers with a high school diploma or bachelor's degree, Asians and Pacific Islanders will earn about \$200,000 and \$400,000 less, respectively, than White non-Hispanics during their work life.

Though on average, work life earnings are lower for Blacks and Hispanics than White non-Hispanics of the same educational attainment level, the educational investment still pays off. Black workers with less than a high school education would earn less than a million dollars during their work life, increasing to \$1.0 million for workers with a high school education, \$1.7 for a bachelor's degree, and \$2.5 million for an advanced degree. Likewise, Hispanic work life earnings also reflect this ascending outcome. Thus, regardless of race or ethnicity, higher educational attainment equates to higher earnings.